alignment with one of said solder balls on said semiconductor wafer;

contacting said ports and said solder balls;

applying radiant energy to said semiconductor wafer such that said wafer increases uniformly in temperature and transfers heat to said solder balls, causing the solder balls to reach a liquid state;

separately controlling the temperature of said interposer in order to minimize differences in thermal expansion;

removing said energy such that said solder balls cool and harden, forming physical bonds between said solder balls and said ports; and

separating the resulting composite structure into discrete chips.

15. (Amended) A method for the fabrication fo a semiconductor assembly comprising:

providing a silicon semiconductor wafer [having] comprising a plurality of undivided integrated circuit[s] chips, each circuit chip having a plurality of metal contact pads as electrical entry and exit ports;

forming a first planar array of solder balls attached to said contact pads of said plurality of chips on said semiconductor wafer so that each of said contact pads is contacted by one of said solder balls;

providing an interposer of electrically insulating material having first and second opposite surfaces and electrically conductive paths from said first [one] surface to [the opposite] said second surface, forming electrical entry and exit ports on said insulating interposer;

aligning said interposer with said solder ball so that each port is placed into alignment with one of said solder balls on said semiconductor wafer;

contacting said ports and said solder balls;

applying radiant energy having a wavelength of 0.8 to 2.8 μm to said semiconductor wafer such that said wafer increases uniformly in temperature and transfers heat to said solder balls, causing said solder balls to reach a liquid state;

said wavelength causing the water to heat more rapidly than said interposer;

removing said energy such that said solder balls cool and harden, forming physical bonds between said solder balls and said ports;

forming a second planar array of solder balls attached to said exit ports of said interposer so that each of said exit ports is contacted by one of said solder balls; and

separating the resulting composite structure into discrete chips.

16. (Amended) A method for the fabrication of a semiconductor assembly comprising:

providing a semiconductor wafer [having] comprising a plurality of undivided integrated circuit[s] chips, each circuit chip having a plurality of metal contact pads as electrical entry and exit ports;

providing an adhesive layer having first and second opposite surfaces and a multitude of electrically conductive fibers extending through electrically nonconductive material from said first [one] surface to [the opposite] said second surface of the layer while remaining insulated from adjacent fibers;

providing an interposer of electrically insulating material having first and second opposite surfaces and electrically conductive paths from said first [one] surface to [the opposite] said second surface, forming electrical entry and exit ports on said insulating interposer;

placing said interposer vertically and in contact with said adhesive substrate;

providing a polymer film having a plurality of discrete adhesive areas;

providing a plurality of solder balls, one of said solder balls being placed on each of said adhesive areas;

aligning said polymer film to said interposer so that each of said solder balls is placed into alignment with one of said ports;

placing said solder balls inc contact with said ports;

applying radiant energy to said semiconductor wafer such that said wafer uniformly